

IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method of encoding a multichannel signal including at least a first signal component and a second signal component, the method comprising the steps of
 - transforming at least the first and second signal components by a predetermined transformation into a principal signal including most of the signal energy and at least one residual signal including less energy than the principal signal, the predetermined transformation being parameterised by at least one transformation parameter; and
 - representing the multichannel signal at least by the principal signal and the transformation parameter.

2. (original) A method according to claim 1, wherein the method further comprises the step of adaptively determining the transformation parameter based on at least the first and second signal components.

3. (currently amended) A method according to claim 1-~~or 2~~, wherein the principal signal corresponds to a principal component of the first and second signal components.

4. (currently amended) A method according to ~~any one of claims 1 through 3~~claim 1, wherein the predetermined transformation is a rotation and the transformation parameter corresponds to an angle of rotation.

5. (currently amended) A method according to ~~any one of claims 1 through 4~~claim 1, wherein the step of representing the multichannel signal at least by the principal signal and the transformation parameter further comprises the step of representing the multichannel signal by the principal signal, the transformation parameter, and the residual signal.

6. (original) A method according to claim 5, wherein the step of representing the multichannel signal by the principal signal, the transformation parameter, and the residual signal further comprises the steps of

- encoding the principal signal with a first bit rate; and
- encoding the residual signal with a second bit rate smaller than the first bit rate.

7. (currently amended) A method according to ~~any one of claims 1 through 6~~claim 1, characterised in that the principal signal

corresponds to a first signal energy and the residual signal corresponds to a second signal energy smaller than the first signal energy.

8. (currently amended) A method according to ~~any one of claims 1 through 7~~claim 1, wherein

- the method further comprises the step of estimating the residual signal from the principal signal using a prediction filter corresponding to a set of filter parameters; and
- the step of representing the multichannel signal at least by the principal signal and the transformation parameter comprises the step of representing the multichannel signal by the principal signal, the transformation parameter, and the set of filter parameters.

9. (currently amended) A method according to ~~any one of claims 1 through 8~~claim 1, wherein the multichannel signal comprises a stereophonic signal including a left and a right signal component.

10. (original) A method of decoding multichannel signal information, the method comprising the steps of

- receiving a principal signal and a transformation parameter, the principal signal corresponding to a result of a predetermined

transformation of at least a first and a second signal component of a multichannel source signal, the predetermined transformation being parameterised by at least the transformation parameter; and

- generating a first and a second decoded signal component by inversely transforming the received principal signal and at least one residual signal.

11. (original) A method according to claim 10, wherein the step of receiving a principal signal and a transformation parameter further comprises the step of receiving the residual signal.

12. (currently amended) A method according to claim 10 ~~or 11~~,
wherein

the step of receiving the principal signal and the transformation parameter further comprises the step of receiving a set of filter parameters, and

the method further comprises the step of predicting the residual signal from the principal signal using a prediction filter corresponding to the received set of filter parameters.

13. (original) An arrangement for encoding a multichannel signal including at least a first signal component and a second signal component, the arrangement comprising

- first processing means adapted to transform at least the first and second signal components by a predetermined transformation into a principal signal including most of the signal energy and at least one residual signal including less energy than the principal signal, the predetermined transformation being parameterised by at least one transformation parameter; and
- second processing means adapted to represent the multichannel signal at least by the principal signal and the transformation parameter.

14. (original) An arrangement for decoding multichannel signal information, the arrangement comprising

- receiving means for receiving a principal signal and a transformation parameter, the principal signal corresponding to a result of a predetermined transformation of a first and a second multichannel source signal, the predetermined transformation being parameterised by at least the transformation parameter; and

- processing means for generating a first and a second multichannel signal by inversely transforming the received principal signal and a residual signal.

15. (original) A data signal including multichannel signal information, the data signal being encoded by a method of encoding a multichannel signal including at least a first signal component and a second signal component, the method comprising the steps of

- transforming at least the first and second signal components by a predetermined transformation into a principal signal including most of the signal energy and at least one residual signal including less energy than the principal signal, the predetermined transformation being parameterised by at least one transformation parameter; and
- representing the multichannel signal at least by the principal signal and the transformation parameter, resulting in said data signal.

16. (original) A computer-readable medium comprising a data record indicative of multichannel signal information encoded by a method of encoding a multichannel signal including at least a first signal component and a second signal component, the method comprising the steps of

- transforming at least the first and second signal components by a predetermined transformation into a principal signal including most of the signal energy and at least one residual signal including less energy than the principal signal, the predetermined transformation being parameterised by at least one transformation parameter; and
- representing the multichannel signal at least by the principal signal and the transformation parameter.

17. (original) A device for communicating a multichannel signal including at least a first signal component and a second signal component, the device comprising an arrangement for encoding the multichannel signal, the arrangement including

- first processing means adapted to transform at least the first and second signal components by a predetermined transformation into a principal signal including most of the signal energy and at least one residual signal including less energy than the principal signal, the predetermined transformation being parameterised by at least one transformation parameter; and
- second processing means adapted to represent the multichannel signal at least by the principal signal and the transformation parameter.